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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,844

07/20/2006

Norihisa Moriya

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EXAMINER

WONG, TINA MEI SENG

ART UNIT

PAPER NUMBER

2874

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,844	Applicant(s) MORIYA, NORIHISA	
	Examiner Tina M. Wong	Art Unit 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 11-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/4/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted by the International Bureau under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO2004/068225 to Jeon et al in view of U.S. Patent 6,593,981 to Haim et al.

In regards to claims 11 and 17-19, Jeon et al teaches an LCD device (Figures 1-3) having

- a first polarizing plate
- a second polarizing plate with absorption axes provided orthogonal with each other,
- a color filter (VA-Panel) comprising a substrate, a colored layer comprising a plurality of rows of light transmissive patterns formed on the substrate,
- a first retardation layer (C-Plate) formed as one continuous layer, on the colored layer, made of a liquid crystalline polymer, having an optical axis perpendicular to a plane of the substrate so as to function as a C plate, provided between the first polarizing plate and the second polarizing plate

- a second retardation layer (A-Plate) having an optical axis parallel to the plane of the substrate so as to function as a positive A plate having a positive refractive index anisotropy; and a liquid crystal layer,
- a liquid crystal layer formed between the color filter and the second polarizing plate/second retardation layer, and the second retardation layer is formed on an opposite side of the substrate to the side with the colored layer of the color filter formed or between the substrate of the color filter and the colored layer.

wherein the first polarizing plate, the second retardation layer, the first retardation layer and the second polarizing plate are formed in this order such that the optical axis of the second retardation layer and an absorption axis of the first polarizing plate are disposed substantially perpendicularly and a refractive index anisotropy of the second retardation layer in a visible light range becomes smaller with a shorter wavelength.

But Jeon et al fails to explicitly teach the thicknesses to differ according to its color. However, Haim et al also teaches an LCD device with a color filter. Haim et al further teaches the thicknesses of each color to differ. (Figure 5) By forming the filters at different thicknesses, Haim et al is able to more easily and cost effectively manufacture the LCD device. Furthermore, Haim et al teaches the different thicknesses would prevent or eliminate non-uniformity in the finished display and therefore resulting in a clearer image. (Column 6) Therefore, for the purposes taught by Haim et al, it would have been obvious at the time the invention was made to a person having ordinary skill in the art for the thicknesses to differ according to its color.

In regards to claims 12 and 20-22, Jeon et al in view of Haim et al discloses the total thickness of the colored layer and the thickness of the first retardation layer to be constant and

the thick of the first retardations layer to differ according to the thickness of the light transmissive pattern.

In regards to claims 13-16 and 23-30, Haim et al teaches the thicknesses of the colors to be in the order of blue, green red, blue being the thickest. However, although Haim et al does not explicitly teach for the thicknesses of the colors to be in the order of red, green blue, red being the thickest, Applicant has claimed an alternative thickness relationship between the three colors. Furthermore, Applicant has not stated for this specific relationship to solve any stated problem or is for any particular purpose and it appears the relationship alternatively claimed by Applicant and taught by Haim et al would function equivalently, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have used either of the claimed relationships.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The documents submitted by applicant in the Information Disclosure Statement have been considered and made of record. Note attached copy of form PTO-1449.

NOTE: Applicant has submitted U.S. Patent Applicant Publication 2004/0156001 to Moriya. It appears to the Examiner this Publication/Application may have been commonly owned and assigned at the time the invention was made. Applicant is requested to submit this statement to exclude this reference under 35 U.S.C. 103 (a) if the Examiner's findings are correct. Otherwise, this reference may be applied to a future rejection of the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tina M. Wong whose telephone number is (571) 272-2352. The examiner can normally be reached on Monday-Friday 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tina M Wong/
Primary Examiner, Art Unit 2874